

**DIGITAL PREDISTORTION TECHNIQUE FOR WCDMA WIRELESS
COMMUNICATION Transceiver AND METHOD OF OPERATION THEREOF**

ABSTRACT OF THE DISCLOSURE

A Wideband Code-Division Multiple Access (WCDMA) transceiver and a method of operating the same. In one embodiment, the transceiver includes: (1) a transmit chain having a lookup table that provides coefficients to a digital predistorter based on power indicators and (2) a predistorter training circuit, coupled to the transmit chain, that employs a receive chain of the WCDMA transceiver to provide a digital compensation signal that is a function of an output of the transmit chain and employs both the power indicators and the digital compensation signal to cause the lookup table to provide alternative coefficients to the digital predistorter thereby to reduce distortion in the output.